

Brown (Geo. S.)

[Reprinted from THE MEDICAL NEWS, November 4, 1893.]

**CHOLECYSTOTOMY NECESSITATED BY OB-
STRUCTION OF THE CYSTIC DUCT.**

BY GEORGE S. BROWN, M.D.,
OF BIRMINGHAM, ALA.

P. H. L., white, twenty-five years of age, a contractor, and a strong, hearty man with a splendid personal and family record, has lived all his life out of doors. On July 1, 1893, at 11 P.M., after having eaten a hearty supper, he was awakened from sleep by severe colic in the epigastrium. The usual household remedies failed to give relief, and he suffered all night. At 11 A.M. on the next day I saw him, and at once administered a hypodermatic injection of morphin ($\frac{1}{2}$ gr.), and gave him an ounce of castor oil by the mouth. He vomited the oil at once. The vomiting, which soon became bilious in character, continued at frequent intervals all of that afternoon and night; and the pain was so severe as to necessitate repeating the morphin injection about every four hours. At 4 A.M. on July 3d I was hurriedly sent for. I found the man with all of the symptoms of a general peritonitis. His temperature was 103° , his pulse 110; the belly was swollen, hard, and tender; the legs were drawn up, and the face anxious. Vomiting was frequent. A rupture of some kind being suspected, preparation was made for an exploratory incision. By the time our arrangements were completed, however, about two hours later, the pulse and temperature had fallen a little, and the left side of the abdomen seemed not quite so tense. It seemed probable now that the peritonitis would prove to be limited to the right side, and we therefore deferred the exploration.



Although the chances were in favor of the appendix being the seat of trouble, no tumor was discoverable in that region, and the pain and tenderness were greatest in the epigastrium, although the whole right side was tense and sensitive. During the next forty-eight hours the patient was in constant pain, and he was again given morphin (gr. $\frac{1}{2}$) with the needle every four or five hours. He had hiccough now at times, and complete obstipation. All of this time we had been using enemata of every kind without result. The localized peritonitis in the epigastrium was clear enough now, and as he said that he thought he had swallowed some plum-seeds just before his attack began, obstruction from them was considered possible, with appendicitis, some trouble with the gall-bladder, and volvulus.

On the fifth day after the attack began, a little fecal matter came away in the warm-water enema. He was then given one-drop and two-drop doses of croton oil cautiously, until he had taken in all fourteen drops, over a period of two days. All of this moved his bowels very slightly. He was then given ten grains of calomel, which had the desired effect. On the eighth day the pain and fever and tenderness began to subside, and on the tenth day his pulse and temperature were normal, and he had no pain and only slight tenderness.

His diet was limited to peptonized milk, and during the three days in which he had no fever he complained that even a very small quantity of the milk made him feel unaccountably full. On the night of the thirteenth day, after having taken more of the milk than usual, he had a painful vomiting attack, and the old pain and fever gradually came back. After daily examinations of the hepatic region, a slight fulness of the liver was apparent. The right side was an inch larger than the left, and there was a visible fulness of the intercostal spaces in the axillary line.

On the sixteenth day the obstipation returned. On the

eighteenth day the temperature reached 102°. On the seventeenth the temperature remained at 102°, the pulse was 110, and patient was altogether worse. On the eighteenth he was again given ten grains of calomel, with no result. At this time a tumor in the region of the gall-bladder was apparent, and a slight jaundice appeared for the first time.

At 8 A.M. on the twentieth day I cut down on this tumor. It was found to be the transverse colon, the border of the liver, and the gall-bladder, all massed together by inflammatory material, undoubtedly the result of the localized peritonitis of two and a half weeks before. The gall-badder was greatly distended, but was covered in front by the colon. With a little difficulty the adhesions were broken up, and the gall-bladder was exposed.

I now attempted to break through the adhesions sufficiently to palpate the ducts, but on the escape of a little bile, the attempt was abandoned and the torn adhesions were packed with gauze. I now stitched the gall-bladder to the abdominal wall and freely incised it. It contained eight or ten ounces of dark-colored bile. On introducing the irrigator about a tablespoonful of hardened particles was washed away. None of them was hard enough to be called a stone, nor could any stone be found with the forceps. The pouch-like cavity was about five inches deep. The wound was dressed with a strip of gauze for drainage. More of these particles were washed out on the second and third days, and on the fourth day the wound was discharging a large quantity of golden-yellow bile. At this time the jaundice had disappeared, and the pulse and temperature were again normal.

The patient now gained strength very slowly up to the fourteenth day. As he had no fever or pain, and was eating and sleeping well, this slowness seemed to be directly due to the large quantity (at least two pints every twenty-four hours) of the bile he was losing. One or two lumps

of the inspissated bile came away on the dressing every day, and an occasional washing brought away more.

On the fourteenth day after operation, he again complained of fulness after eating; his stools became putty-colored, and the amount of bile from the fistula markedly increased. He was put upon full doses of sodium phosphate. The amount of fluid was now very much increased, and very much diluted, so that it was almost colorless; this seemed to be due directly to the sodium phosphate.

On the night of the eighteenth day he had another severe attack of colic, and on the next day the bile again appeared in the stools, and the amount discharged from the fistula very rapidly diminished, so that from that time on the dressings were only slightly stained.

This last attack of pain the patient thought was due to the omission of the sodium phosphate, because the fluid discharged immediately became thicker and less in quantity. And it seems to me that this was a very good explanation, in that it probably allowed a piece of inspissated bile to lodge in the common duct. After this the bile had an uninterrupted flow into the duodenum, and from this on the recovery was rapid. The fistula was entirely closed six weeks after the operation.

I think it most probable that this patient's trouble was caused by a small stone, which first lodged in and then ruptured the cystic duct. Had it been in the hepatic or common duct there could not have been the free flow of bile which he vomited all through the first day and night. After this the inspissated bile which was present in the gall-bladder allowed the bile to enter, but acting as a valve prevented its outflow into the intestine. The escaping stone and a small quantity of the fluid were sufficient cause for the localized inflammation.

I was rendered invaluable advice and assistance in this case by Drs. Cunningham, Wilson, and Thomas D. Parke, of this city.